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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,153	03/16/2001	Takahiro Yamaguchi	KPO109	5797

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EXAMINER

HA, DAC V

ART UNIT PAPER NUMBER

2634

DATE MAILED: 06/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,153

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Dac V. Ha

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-7 and 10-14 is/are rejected.
- 7) ☒ Claim(s) 1,2,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 1-4, 5A, 5B, 6, 10A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Claim Objections

3. **Claims 1-14** are objected to because of the following informalities:

Claim 1:

Line 4, the recitation "timing jitter sequence;;" should be changed to "timing jitter sequence;"

Line 8, the parameter "k" should be clearly defined (i.e., real number).

Claim 2:

Line 4, the recitation "the difference sequence" should be differentiated from the recitation "difference sequence" on line 6 of claim 1.

Line 6, the recitation "said correcting part" should be made in consistent with the recitation "a corrector part" on line 7 of claim 1.

Claim 4:

Line 6, the recitation "the sequential order" should be changed to "a sequential order".

Claim 5:

Line 5, the recitation "said correcting part" should be made in consistent with the recitation "a corrector part" on line 7 of claim 1.

Claim 6:

Line 5, the recitation "said correcting part" should be made in consistent with the recitation "a corrector part" on line 7 of claim 1.

Claim 8:

Line 5, the semi-column ";" should be removed.

Line 8, the parameter "k" should be clearly defined (i.e., real number).

Claim 9:

Line 5, indentation in front of "step of calculating" should be changed to be consistent.

Line 7, the parameter "k" should be clearly defined (i.e., real number).

Claim 11:

Line 5, the recitation "the sequential order" should be changed to "a sequential order".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 3-7, 10-14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. **Claim 3** recites the limitations

"the analytic signal" in line 3;

"the sampling timing" in line 4;

"the instantaneous phase noise" in line 18;

"the inputted signal" in line 19;

"said continuous phase converting part" in lines 22-23;

"said continuous phase converting part" in line 23. There are insufficient antecedent basis for these limitations in the claim.

7. **Claim 7** recites the limitation "said instantaneous phase noise detecting part" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

8. **Claim 10** recites the limitations

"the analytic signal" in line 3;

"the approximated zero-crossing point" in lines 3-4;

"said timing jitter estimating step" in line 4;

"the instantaneous phase noise" in line 15;

"the approximated zero-crossing timing" in lines 17-18. There are insufficient antecedent basis for these limitations in the claim.

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9. **Claim 14** recites the limitation "said timing jitter estimating step" in lines 4-5.

There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

10. Claims 1-14 are allowed.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Naudet (6,377,644) discloses Periodic Signal Digital Testing.

Frisch et al. (US 6,295,315) disclose Jitter Measurement System And Method.

Burns et al. (US 6,240,130) disclose Method And Apparatus To Measure Jitter.

Marz (US 5,923,706) disclose Process For Measuring Phase Jitter Of A Data Signal.

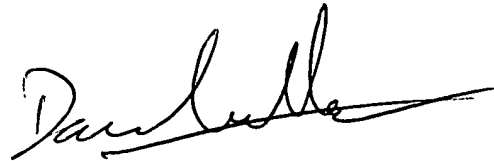
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dac V. Ha', with a long horizontal flourish extending to the right.

Dac V. Ha
Examiner
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